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"The notion of sea basing has to be thought of, not as a base at sea, but rather about operational maneuver from the sea. Being able to use the sea as a joint maneuver space, not just a naval maneuver space. I think sea basing is going to be one of the biggest engines for change."

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Sea Basing: Poised for Takeoff

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The purpose of this paper is to keep the concept of sea basing from being abandoned prematurely. At the moment, sea basing is being considered from a programmatic point of view—what will it take and what will it cost. The Office of Force Transformation (OFT) believes that this programmatic assessment is premature, and, if retained, may choke off innovative thinking about the *concept* of sea basing. This paper will provide background on the concept; an historical example of the concept in practice; and a defense of sustaining the *concept* through a program of simulation and experimentation.

Background

The Sea Basing Joint Integrating Concept (JIC) defines sea basing as "the rapid deployment, assembly, command, projection, reconstitution and re-employment of joint combat power from the sea, while providing continuous support, sustainment and force protection to select expeditionary joint forces without reliance on land bases within the [joint operational area]." OFT has a different definition of sea basing, and that is the "elimination of the conceptual difference between operations on land and operations on or from the sea."

Put another way, the military services think nothing of operating in very different land environments, from jungles to deserts, and from mountains to open plains. Each environment has its own special challenges, but the *concept* that U.S. forces will adapt doctrine, equipment and training to operate in almost all land environments is taken for granted. Why not take the same approach to operations on and from the sea? Why not eliminate the conceptual boundary between the land and the sea?

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In some sense, this is what the Marine Corps did before World War II. In its 1934 *Tentative Manual for Landing Operations*, the Marine Corps overcame the traditional conceptual division between sea and shore by abolishing it:

"A landing operation against opposition is, in effect, an assault on an organized or unorganized defensive position modified by substituting initially ships' gunfire for that of light, medium, and heavy field artillery, and frequently, carrier-based aviation for land-based air units until the latter can be operated from shore." (Quoted in *The U.S. Marines and Amphibious War*, by Jeter A. Isely and Philip A Crowl [Princeton University Press, 1951], page 37.)

That conceptual approach to landing operations led to a series of experiments to see if in fact ships' gunfire *could* substitute for field artillery, and if carrier-based aviation *could* safely and effectively support landings. The results of those experiments did *not* eliminate all the uncertainties (of command and control, communications, and the value of amphibious tractors vs. landing craft) associated with such operations, but what was learned through exercises gave the Marines enough confidence in their approach to amphibious operations to keep them focused on the development of the intellectual and material tools required to make such operations effective.

The Okinawa Example

Sea basing, however, is much more than amphibious operations. Considering an actual example may make the point clear. The conquest of Okinawa in the spring and summer of 1945 was conducted from a huge sea base, some elements of which were actually located about 800 miles away in the Marianas Islands. Table 1 lists the forces used in the Okinawa operation.

Table 1: Forces Employed in Assaulting and Reducing Okinawa

Force	Permanent or Intermittent Commitment to Forward Part of the Sea Base
USMC III Amphibious Corps (3 divisions)	permanent
Army XXIV Corps (4 divisions)	permanent
Army Air Corps XXI Bomber Command (5 B-29 wings)	intermittent
8 Navy transport squadrons (seagoing)	permanent
Royal Navy Carrier Task Force supported by auxiliaries	intermittent
USN Gunfire & Covering Force	permanent
USN Amphibious Support Force	permanent
USN Fast Carrier Force	intermittent
USN Logistics Support Group	permanent
USN Service Squadron	permanent

Force	Permanent or Intermittent Commitment to Forward Part of the Sea Base
USN Western Islands (forward base) Group	permanent
USN Mine Clearing Force	permanent
USN Northern & Southern Attack Forces	permanent
USN Demonstration (deception) Group	permanent
USN seaplane air groups & tenders	permanent

"Permanent" means the force moved forward to Okinawa and stayed there. "Intermittent" means that the force directly and indirectly supported the invasion and conquest of Okinawa but did not remain on station. The carrier forces, for example, ranged widely, attacking Japanese airfields that served as the sources of assaults against the invasion force. The B-29s of the XXI Bomber Command based in the Marianas (Saipan, Tinian and Guam) bombed Japan proper in direct support of the invasion of Okinawa and as part of a long-term operation to destroy Japan's industry.

This was a huge force—about as large as that which assaulted Normandy in June 1944. In effect, it was the combined forces of the United States moved thousands of miles across the Pacific to establish a forward base from which the invasion of Japan could be launched. Historian Samuel Eliot Morison, in his *History of U. S. Naval Operations in World War II, Vol. XIV*, captured the tremendous distance in this way: Okinawa was 4,040 miles west of Pearl Harbor "on a great circle course—about the same as the air line from Berlin to Juneau, Alaska."

Table 2 provides both actual numbers of types of ships engaged in the operation and the percentage of the total number of such ships that those engaged represented.

Table 2: Numbers of Ships Engaged (Strike or Support)

Ship Type	Number Committed	Number Committed as Percent of Total in USN Inventory	Category (Strike or Support Platform)
Fast battleship	8	80%	Strike
Old battleship	10	77%	Strike
All cruisers	29	38%	Strike
Destroyers & destroyer escorts	189	25%	Strike
Heavy carriers	12	63%	Strike
Light carriers	7	88%	Strike
Escort carriers	29	38%	Strike and support

Ship Type	Number Committed	Number Committed as Percent of Total in USN Inventory	Category (Strike or Support Platform)
Minesweepers	73	34%	Strike
Ammunition ships	18	100%	Support
Store ships	9	50%	Support
Hospital ships	8	53%	Support
Amphibious flagships	7	41%	Strike
Attack transports	82	87%	Strike
Attack cargo ships	40	100%	Strike
Oilers	49	57%	Support
Gasoline tankers	15	21%	Support
Repair ships	12	86%	Support
Seaplane tenders	9	75%	Strike
Fleet tugs	14	47%	Support

Note: These numbers are approximations, and are based on the lists provided by Morison in his *History of U.S. Naval Operations, Vol. XIV, Appendix I*, (pp. 371-388), and *ONI 222-US, United States Naval Vessels* (1 September 1945), Office of Naval Intelligence.

What these numbers show is that the "sea base" that assaulted Okinawa consisted of much of the U.S. Navy—most of the battleships and fast carriers, and in some cases *all* of the specialized ships (like the attack cargo ships) built to sustain a major amphibious operation. This chart does not show the numbers of specialized landing ships, such as Landing Ship Tanks (LSTs), or the huge numbers of amphibious tractors employed, but the numbers were great: The total number of "ships" ran to at least 1,200, and, if you count the smaller landing craft, the number climbs to over 1,500. This huge force was needed to combat the 77,000 well armed and well trained Japanese defenders of the island, who were supported by nearly two thousand suicide aircraft (in effect, manned cruise missiles) launched from airfields in Japan proper over a series of weeks.

What does this case tell us? ***First***, it suggests that the "lessons learned" from prewar exercises and actual wartime experience were effective. The sea base that conquered Okinawa and laid the foundation for the invasion of Japan's home islands used forces and doctrines that had been pioneered in the late 1930s, and then ruthlessly refined, modified and sometimes even rethought by April 1945, when the actual assault on Okinawa began.

Second, this concept of the sea base was multi-service and multinational. B-29 strategic bombers coordinated their attacks with raids by carrier task forces. Army and Marine ground units fought side-by-side, and British and U.S. naval task forces complemented one another. The coordination of 1945 was not "joint" as operations are today, but it was an impressive effort for its time.

Third, the sea base had expanded beyond the concept of the amphibious assault force. A comparison of the operation against Okinawa in 1945 and that against Guadalcanal in 1942 is striking. Both operations were battles of attrition. In both cases, the question was whether U.S. forces could *sustain* the offensive in the face of determined enemy resistance. Doing so required continuous pressure on the enemy supported by (a) an adequate flow of men and supplies, (b) adequate repair and support, (c) useful intelligence, and (d) the ability to keep the enemy from continuing the struggle.

In the case of Guadalcanal, the key tactical objective was Henderson Field. So long as U.S. forces held it, they could cover the movement of U.S. reinforcements to Guadalcanal and halt or at least slow down the movement of Japanese reinforcements to the island. Henderson Field was like a stationary aircraft carrier fought over by two competing navies. That is, *Guadalcanal was essentially a naval battle.*

By the time U.S. forces invaded Okinawa, however, there was really no Japanese navy left to reinforce the Japanese defenders. Japanese ground forces were isolated—cut off from reinforcement from the Japanese mainland. Yet, U.S. forces operating against Okinawa were only 350 nm from Kyushu and were therefore within range of sustained air attack. *Okinawa wasn't a naval battle, though the Navy bore the brunt of the responsibility for moving U.S. forces to the island.* It was, instead, the first stage of a huge land battle fought between Japanese land and air forces and a mobile land-sea-air force brought from the U.S. proper to the shores of Japan.

Okinawa did not reflect the expectations of prewar U.S. planners. They thought in terms of a series of naval battles and amphibious operations that would lead to the defeat of the Japanese fleet and the blockade of Japan. That happened, but what also happened was the movement of U.S. forces to the point where the boundary between the sea and the shore on Japanese beaches would be eliminated—where the manpower and industrial might of the U.S would crash into Japanese forces on their territory just the way that U.S. and Allied forces had beaten their way into Nazi Germany. In that sense, Okinawa wasn't a battle. Rather it was the first campaign of a major conventional and decisive operation to end a war.

Put another way, *the concept of a sea base was a war-winning concept*, and not a concept of limited operations. In the case of Okinawa, it was decisive. U.S. forces came, stayed, and in the process smashed what was left of Japanese shipping and industry, and brought the industrial might of the U.S. to bear against the Japanese people themselves. When U.S. B-29s dropped nuclear weapons on Japan, the Emperor was faced with the humiliating option of surrender or the option of allowing his culture to be exterminated. Okinawa was a preview of this dilemma because it proved that the U.S. could effectively wield its industrial might against the people of Japan and their culture.

Fourth, the sea base was terribly expensive. Only a mobilized and dynamic economy could produce one, and, because it was seen as something to be done—like major war itself—only in a grave emergency, much of what went into the sea base was either "consumable" or "disposable" (like almost all the smaller landing craft) or "off the shelf" (like the converted merchant ships that became transports, cargo ships and tenders). Given the technology of 1945, the sea base was seen as something that had to be done but not at all as something that could be or should be sustained in peacetime.

Fifth, the sea base was given a death blow by nuclear weapons, which posed a threat to *any* force—sea, land or air—that concentrated its assets. Nuclear weapons were ideal to use against massed forces. In the future (after 1945), forces would have to figure out how to operate separately (or dispersed) and then mass quickly, surprising the enemy and not allowing him to use his nuclear weapons. Given the slow speed of much of the sea base's infrastructure, it did not meet the basic requirement imposed on all forces in the nuclear age. It was therefore abandoned, *though relatively high speed amphibious forces were retained and developed.* The descendants of those high-speed forces are the ones deployed today, with their embarked and organic support and aviation units.

Sixth, the sea base crafted in 1944-45, was suited to a specific war and a specific enemy. It was not designed to be a tool for use against a broad range of enemies, if only because such enemies did not exist. There was no notion that a small nation, such as North Korea, might gain nuclear weapons and the means to project them great distances. The high cost of entering the "nuclear club" kept its membership to a minimum, and the nations who both opposed the U.S. and developed nuclear weapons—the USSR and China—were land powers. It wasn't clear that a sea base could be a decisive weapon against them, as it had been against Japan.

So, what does this story tell us? It highlights the issues that must be dealt with in any effort to elaborate the approach to sea basing that eliminates the distinction between operations at sea and operations on land. If the land/sea boundary is to become transparent, then the experience of 1945 suggests the issues we have to grapple with:

Sea Basing Issues

1). Careful thought (experiments in our minds), simulations (experiments on computers), and experiments and exercises in the field must be carried on in a rigorous, persistent way. Jumping quickly to saying, "We need this or that" will just choke off the experimentation that is essential. *The debate over sea basing must not—at least initially—be allowed to become a debate over resources.*

2). Sea basing must be joint and multinational if it is to be effective.

3). Sea basing *must not be confused with amphibious assault*. An amphibious assault capability may be an element of sea basing, but it is not the same as sea basing itself.

4). Cost matters. Although thought and experimentation about sea basing must not be precluded or clouded by arguments over cost, the larger notion of "strategic cost" must be applied to the concept. Sea basing can't be thought about—and the results of that thought experimented with—in isolation. Sea basing must be understood to be just one of perhaps several methods of applying U.S. military power. In 1945, in facing Japan, the services really didn't have that option. Today we do.

5). How can U.S. forces break down the land/sea boundary in the face of Weapons of Mass Destruction (WMD)? This is just a variation of the issue that already confronts U.S. conventional forces. Can they be kept out of certain areas by the threat of WMD? If WMD is used, can U.S. forces still achieve their objectives? Is the sea base any different than other conventional forces in this respect?

6). Is sea basing just another term for doing what U.S. forces now do well? If it is, then it has little to offer for the future. The Navy and Marines already have a reliable, effective amphibious capability. If sea basing is just a more powerful form of amphibious assault, and if we can find that is the case through simulations and experiments, then sea basing will not be worth further effort. OFT sees the concept of sea basing as being about projecting the might of the nation against an objective, especially another nation. There are obviously other ways to do this, and those other ways may be more effective and/or more cost-effective.

The "bottom line" in this assessment of previous sea basing is that there is a need to think through the *concept* and then compare it with competing concepts. As the Red Team examining the Sea basing JIC (Joint Integrating Concept) in September 2004 noted, this hasn't been done yet—and it needs to be.

Sustaining the Sea basing Concept

In its 14 September 2004 brief on the Sea basing JIC, representatives of the Office of the Chief of Naval Operations (OPNAV) said that the *sea base* was "an inherently maneuverable, scalable aggregation of distributed, networked platforms that enable the global power projection of offensive and defensive forces from the sea," and included "the ability to assemble, equip, project, support, and sustain those forces without reliance on land bases within the Joint Operations Area." OFT regards this definition as too definite, and too soon.

OFT recommends that efforts to define sea basing be put off until the concept has been explored with more rigor. For example, there may be opposing views of what sea basing is, just as there were opposing views of what an amphibious assault was before 1934, when the Marines wrote their *Tentative Manual for Landing Operations*. For at least a decade before issuing that manual, the Marines, Army and Navy had discussed whether such landing operations were feasible. They had studied the characteristics and fates of previous amphibious operations, especially the experience of the British at Gallipoli in 1915. In addition, Marines had conducted a mock amphibious assault on the Panama Canal in 1923 and another against Culebra Island (Puerto Rico) in 1924. A major Army-Navy-Marine Corps exercise was staged on Oahu, Hawaii, in 1925. All of this experience went into the writing of the *Manual* in 1934, and yet *it was still entitled "tentative."* It was tentative because there was still so much to learn. OFT believes that this is a good model—not a rush to concept, but a gradual development of a concept based on thinking, simulations and exercises.

The immediate problem is the imperative to complete the sea basing JIC and push it through the approval process. OFT believes it would be wise at this stage of the process to stop trying to write an agreed-upon JIC and open the development of the sea basing *concept* to competition. Let different organizations—especially some from outside the Pentagon—explore the concept, then have them present the results of their work (especially thought pieces and simulations) to the Joint Staff, Joint Forces Command (JFCOM), and OFT. The more promising concepts that emerge could then be taken up by JFCOM's (J-9) directorate for joint experimentation.

OFT favors building a back-and-forth process that starts with concept development and then moves to experimentation and then further concept development. This is the model adopted by JFCOM J-9, and OFT would like to see it used more often. However, initial concept development and tests in simulations and war games need not be restricted to JFCOM J-9. The services have various means of concept development ("thought" experiments), and the services have funds to finance simulations (experiments on computers) and experiments in the field. All three means should be used before any effort is made to define "sea basing" in terms of systems and platforms.

There is another way to put the argument. Go back to Table 2. If you had waved that table, with its huge numbers of ships, in front of the writers of the *Tentative Manual for Landing Operations* in 1934, they might have balked at the cost involved and at the complexity of the whole operation. The Okinawa operation is not what they had in mind. But if they hadn't done their work, and if the Navy and Marines (and also the Army) hadn't pushed ahead with experiments and exercises, there might not have been an Okinawa operation. They laid down the foundation for a dramatic future, but could not foresee just where it would lead.

Concept development of the sort OFT is describing (and advocating) isn't designed to get you from point A to point B. It's designed instead to get you from point A to point D and then to—maybe—points G and H. It is an open-ended process. Its focus is not on products and systems but on concepts. At the same time, it links concept development to the "real world" through experiments and exercises. It holds down the risk of embracing something that isn't feasible while preserving the opportunity to take advantage of new technologies and concepts of operations. OFT believes that sea basing is a prime candidate for this approach and therefore recommends that only tentative sea basing concepts be developed and "tested" at this time. ***But they should be developed and tested—not abandoned now as too expensive or technologically challenging.***